

Phasmids on Praslin and La Digue Islands in the Seychelles

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Key words

Phasmida, Seychelles, La Digue, Praslin, *Carausius alluaudi*, *C. sechellensis*, *Graeffea sechellensis*, *Phyllium bioculatum*.

Phasmids have been recorded from five granitic islands of the Seychelles archipelago. Information regarding which of the six species occur on each island has previously been summarized in tabular form (Matyot 1990). The data provided then for the islands of Praslin and La Digue were based on the literature and not on first-hand observation. Following a visit to Praslin and La Digue in October 1991, I am now able to update the distribution records for these two islands.

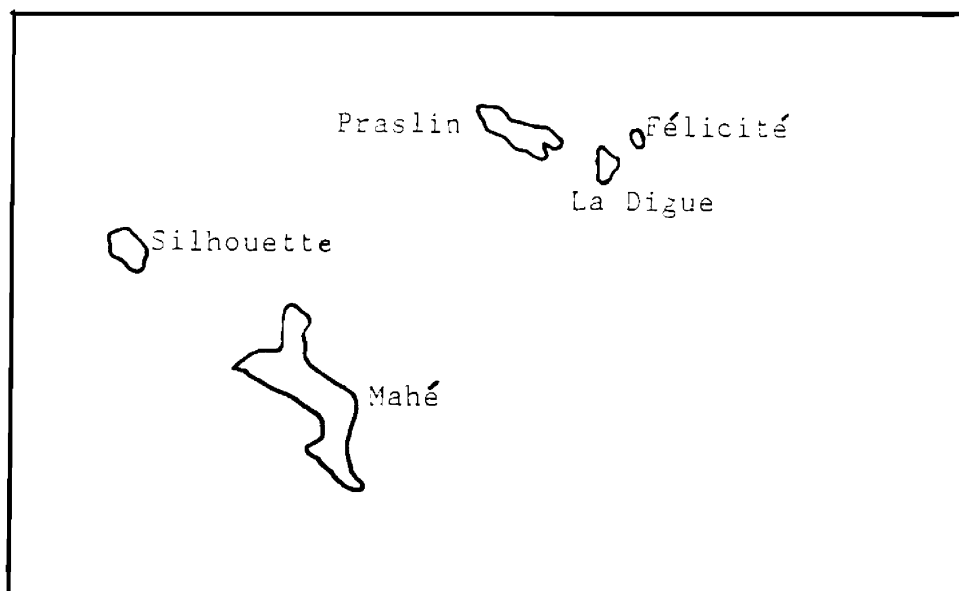


Figure 1. The islands of the Seychelles known to have phasmids.

Praslin

Alluaud discovered *Carausius sechellensis* (= *Lonchodes sechellensis*) on this island in 1892 (Bolivar 1895). The species was found again there in 1905 by Gardiner and in 1908 by Scott during the Percy Sladen Trust expeditions to the Indian Ocean. In 1908 Scott also collected *Graeffea sechellensis* on Praslin (Bolivar & Ferrière 1912). These two species were the only ones I observed during a five day stay on Praslin from 18th to 22nd October 1991.

As on Mahé, *C. sechellensis* is the species with the greatest altitudinal and habitat range. Four sightings of this phasmid were made:

1. At about 340m above sea level at Fond Azore, close to the highest point on Praslin (367m). This specimen was a nymph, possibly third instar. It was resting during daytime on one of the fronds of a young palmis palm, *Deckenia nobilis*. No ferns, the preferred foodplants of this stick insect, were visible in the immediate vicinity.
2. Near sea level on the edge of a mangrove swamp north of Cap Jean Marie at Anse Kerlan. This was a small nymph, probably second instar. It was resting during the day on a fouzer taba fern, *Nephrolepis biserrata*.
3. At about 80m above sea level, along the track from Baie Sainte Anne to Fond Dalbaretz. This was another nymph, probably third instar. It was resting at night on one of the fronds of a low lantannyen milpat palm, *Nephrosperma vanhoutteanum*. There were clumps of the fern *N. biserrata* growing close by.

4. At about 20m above sea level, along the track from Anse Volbert to Salazie. This sub adult male was resting in daytime on one of the fronds of a young coconut palm, *Cocos nucifera*. Clumps of *N. biserrata* were growing beneath the palm.

The palm stick insect, *G. seychellensis*, was observed on two occasions on Praslin:

1. At about 150m above sea level, along the track from Baie Sainte Anne to Fond Dalbaretz. Two adults, a male and a female (green form), were resting at night on different leaflets of the same frond of *N. vanhoutteanum*.
2. At about 100m above sea level, along the track from Anse Volbert to Salazie. A nymph, possibly third instar, was resting on a frond of *N. vanhoutteanum*.

The leaf insect *Phyllium bioculatum*, which is known to occur on Mahé and Silhouette, was not observed by me on Praslin, but several inhabitants have reported seeing leaf insects on the island. According to notes that E.S. Brown has left at the Hope Department of Entomology (Oxford University Museum), in January 1953 he came across a male of "*Pulchrifolium gelonus* (Gray)" (= *Phyllium bioculatum*) at Grand Anse on the west coast of Praslin (Graham Floater, personal communication). Since no specimens have been available for study and positive identification, the possible presence of *P. bioculatum* on Praslin is indicated by a question mark in

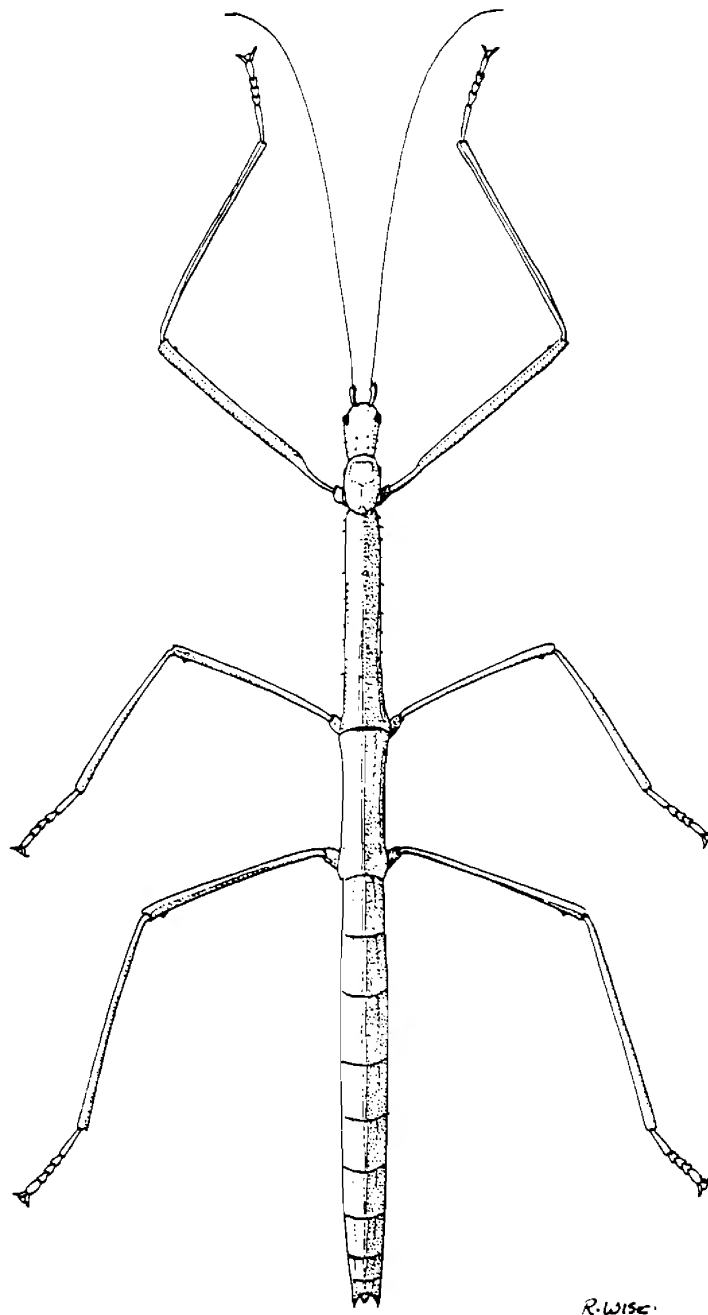


Figure 2. Female *Carausius alluaudi*, can reach 11cm in length. [drawing: Rosemary Wise.]

table 1.

| Species | Mahé | Praslin | La Digue | Silhouette | Félicité |
|-------------------------------|------|---------|----------|------------|----------|
| <i>Carausius alluaudi</i> | * | - | ? | * | - |
| <i>Carausius gardineri</i> | * | - | - | * | - |
| <i>Carausius scotti</i> | - | - | - | * | - |
| <i>Carausius sechellensis</i> | * | * | * | * | ? |
| <i>Graeffea sechellensis</i> | * | * | - | * | - |
| <i>Phyllium bioculatum</i> | * | ? | - | * | - |

Table 1. Distribution of phasmids in the Seychelles. * species present, - species not known to be present, ? species status uncertain.

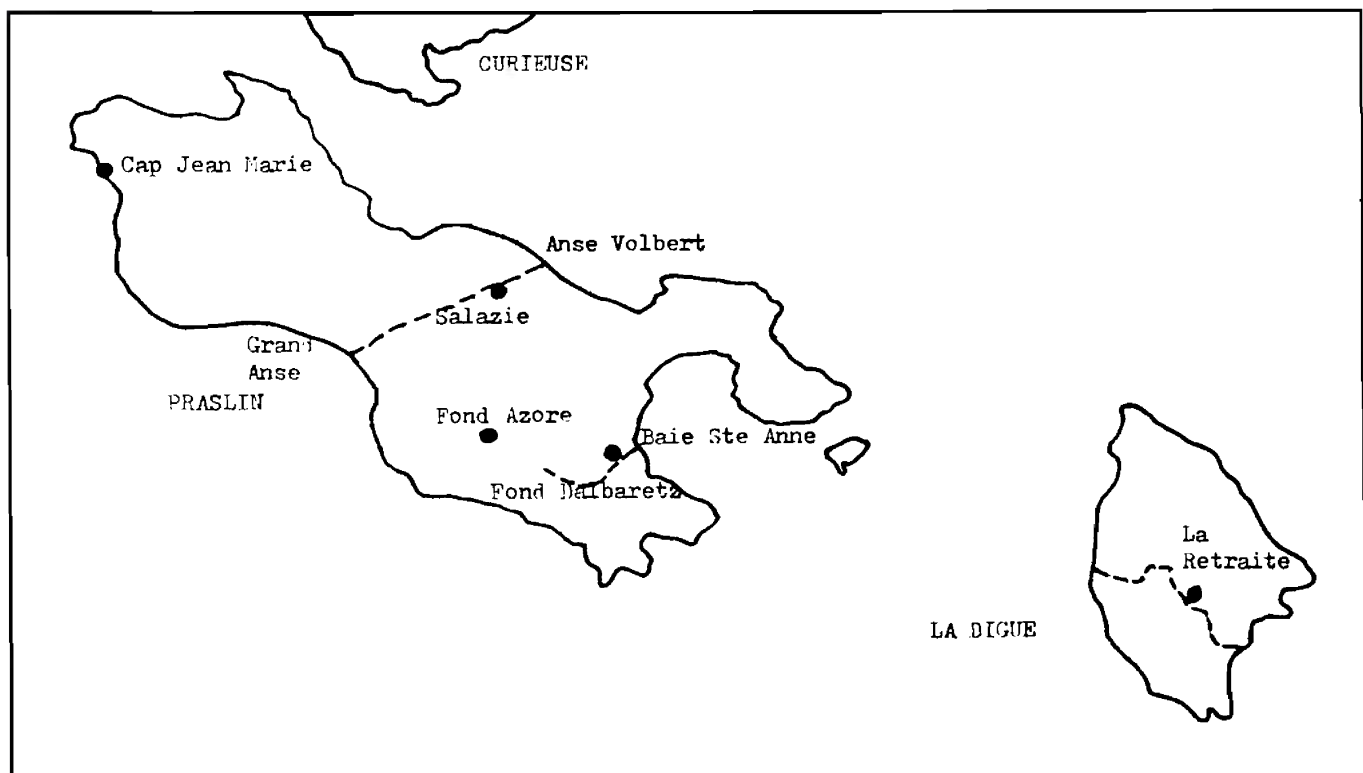


Figure 3. Map showing localities mentioned in the text.

La Digue

Alluaud discovered *Carausius alluaudi* (= *Lonchodes alluaudi*) on this island in 1892 (Bolivar 1895). Since then there have been no further studies of its phasmid fauna. One day, October 24th 1991, was spent looking around areas of La Digue where *C. alluaudi* was likely to be found, but

this search was unsuccessful. The time spent on the island was admittedly short, and the species may still survive in areas which could not be visited. Even so, it must be quite rare, since a large number of likely sites were investigated. These investigations did reveal the presence of *C. sechellensis*, a species hitherto unrecorded from La Digue. Only one specimen was sighted, an adult female which was resting on the fern *N. biserrata* on the eastern side of the road that runs through the La Retraite area, at about 40m above sea level. A Ceratopogonid biting midge was perched on the thorax of the phasmid.

Four other islands, Frégate, Cousin, Curieuse and Silhouette, were also visited in October 1991. Phasmids were not found on the first three, while all known Seychellois species, except *P. bioculatum* were located on Silhouette. The presence of *P. bioculatum* on Silhouette was however confirmed in 1990 (Matyot 1991).

In 1908 Scott found *C. sechellensis* on Félicité as well (Bolivar & Ferrière 1912), but since then the island has been subjected to severe habitat destruction, notably through the replacement of the original vegetation by planted coconut palms. The present status of *C. sechellensis* on Félicité needs to be verified.

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